

**PATENT**

Atty Docket No.: 200400612-1  
App. Ser. No.: 10/820,786

**REMARKS**

Favorable reconsideration of this application is respectfully requested in view of the following remarks.

Claims 1, 2, 4, 11, 16, 20-22, 26, 29, 30-33, 37, 40-43, and 46-48 have been amended and Claims 12 and 34 have been canceled without prejudice or disclaimer of the subject matter contained therein. Claims 1-11, 13-33, and 35-48 are currently pending, of which, Claims 1, 20, 32, and 40 are independent.

No new matter has been introduced by way of the claim amendments; entry thereof is therefore respectfully requested.

**Allowable Subject Matter**

The indication that the present application contains allowable subject matter is noted with appreciation. There are, however, a couple of discrepancies in the Official Action on which claims the Examiner considers to be allowable.

The Official Action Summary and the section entitled "Allowable Subject Matter" of the Official Action indicate that Claims 6, 13-16, and 34 are objected to but are otherwise allowable. However, a rejection of Claim 34 appears on page 7 of the Official Action, first full paragraph. It is thus unclear as to whether Claim 34 is considered to be allowable.

In addition, on page 2 of the Official Action, Claims 35 and 36 are indicated as allegedly being anticipated by Friedrich et al. However, the Official Action does not include a specific rejection of Claims 35 and 36 even though specific rejections of the remaining claims have been made. Moreover, Claims 35 and 36 contain subject matter similar to allowable Claims 13 and 16, respectively, which the Official Action indicated as being

**PATENT**

Atty Docket No.: 200400612-1  
App. Ser. No.: 10/820,786

allowable. Therefore, it is also unclear as to whether Claims 35 and 36 should be considered to be allowable.

The Examiner is therefore respectfully requested to clarify which claims are considered to be allowable over the cited documents of record.

With regard to Claims 20-31 and 40-48, it appears that these claims would be allowable over the cited documents of record if the rejections under 35 U.S.C. §101 were overcome. It is respectfully submitted that the rejections of Claims 20-31 and 40-48 have been overcome by virtue of the amendments above and the arguments below. As such, it is believed that Claims 20-31 and 40-48 are also in condition for allowability.

**Telephone Conference Conducted**

The Examiner is respectfully thanked for the courtesies extended to the undersigned during the teleconference conducted on August 28, 2006. The Examiner was contacted to discuss his interpretation of the claims and the cited documents of record, namely, U.S. Patent Application Publication Serial No. 2003/0193777 to Friedrich et al. The Examiner basically indicated that he interpreted the system controller 130 and 330 of Friedrich et al. as performing all of the functions of the claimed GRAMs, information service, broker, and co-allocator. Although the Applicants' representative disagrees with this interpretation, Claim 1 has been amended to further define the claimed elements.

In addition, with regard to the supply heat index (SHI) as claimed, for instance, in Claim 4, the Applicants' representative requested clarification on which feature in Friedrich et al. discloses SHI. The Examiner indicated that he broadly interpreted this term as including any temperature measurement. This interpretation, however, is incorrect because,

**PATENT**

Atty Docket No.: 200400612-1

App. Ser. No.: 10/820,786

even when interpreted as broadly as was done by the Examiner, Friedrich et al. fails to disclose an index of supply heat as claimed in the present application.

These, and other points, are discussed in greater detail herein below.

**Restriction Requirement Withdrawn**

The Applicant's representative wishes to thank the Examiner for withdrawing the Restriction Requirement.

**Drawings**

The indication that the drawings filed on April 9, 2004 have been accepted is noted with appreciation.

**Information Disclosure Statement**

The indication that the documents cited in the Information Disclosure Statements filed on December 22, 2005 and March 6, 2006 have been considered is also noted with appreciation.

**Claim Rejection Under 35 U.S.C. §101**

The Official Action sets forth a rejection of Claims 20-31 and 40-48 as allegedly failing to produce a real life, real world, useful, concrete, and tangible result. The Examiner suggested that Applicants follow the guidelines set forth on the USPTO website to overcome this rejection.

**PATENT**

Atty Docket No.: 200400612-1

App. Ser. No.: 10/820,786

Although Applicants respectfully disagree with this rejection, Applicants have amended independent Claims 20 and 40 according to the guidelines set forth in MPEP 2106(IV)B(2)(b)(ii), which is a reiteration of the website cited in the Official Action. More particularly, Claims 20 and 40 have been amended according to the "Manipulation of Data Representing Physical Objects or Activities (Pre-Computer Process Activity)" sub-section of the section entitled "Safe Harbors". As stated in the first example under that subsection, data that is an intangible representation of physical activity is within the safe harbor. In the instant case, Claims 20 and 40 claim energy efficiency characteristics of the data centers, which are intangible representations of the physical characteristics of the data centers. Therefore, Claims 20-31 and 40-48 fall within this safe harbor.

In addition, Claims 20 and 40 recite that the workload is placed on a selected data center. As such, Claims 20 and 40 produce a real life, real world, useful, concrete, and tangible result.

For at least the foregoing reasons, the Examiner is respectfully requested to withdraw the rejection of Claims 20-31 and 40-48 as being directed to non-statutory subject matter.

**Claim Rejection Under 35 U.S.C. §102**

The test for determining if a reference anticipates a claim, for purposes of a rejection under 35 U.S.C. § 102, is whether the reference discloses all the elements of the claimed combination, or the mechanical equivalents thereof functioning in substantially the same way to produce substantially the same results. As noted by the Court of Appeals for the Federal Circuit in *Lindemann Maschinenfabrick GmbH v. American Hoist and Derrick Co.*, 221

**PATENT**

Atty Docket No.: 200400612-1  
App. Scr. No.: 10/820,786

USPQ 481, 485 (Fed. Cir. 1984), in evaluating the sufficiency of an anticipation rejection under 35 U.S.C. § 102, the Court stated:

Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim.

Therefore, if the cited reference does not disclose each and every element of the claimed invention, then the cited reference fails to anticipate the claimed invention and, thus, the claimed invention is distinguishable over the cited reference.

Claims 1-5, 7-12, 17-19, 32, 33, and 35-39 have been rejected under 35 U.S.C. §102(b) as allegedly being unpatentable over the disclosure contained in U.S. Patent Application Publication Serial No. 2003/0193777 to Friedrich et al. For at least the following reasons, it is respectfully submitted that this rejection is clearly improper and should be withdrawn.

Initially, it is respectfully submitted that the heading of this rejection appears to contain errors. More particularly, the heading indicates that Claims 35 and 36 are rejected by Friedrich et al., but does not include a rejection of Claim 34. However, the body of this rejection includes a rejection of Claim 34, but is silent with respect to Claims 35 and 36. In fact, Claims 35 and 36 contain features from allowable Claims 13 and 16, respectively, and thus should also be considered allowable. The Examiner is respectfully requested to correct this discrepancy.

Independent Claims 1 and 32 have been amended to include that energy efficiency coefficients, which are functions of the coefficients of performance (COPs) and supply heat indexes (SHIs) of the data centers, are determined. These claims have also been amended to

**PATENT****Atty Docket No.: 200400612-1  
App. Ser. No.: 10/820,786**

include that the data center having the highest energy efficiency coefficient is selected to perform a requested workload.

As described, for instance, on page 18, lines 7, 8 and 19-23 of the Specification, the COPs of the data centers are measures of the heat output and the work input of the data centers, which may vary according to ambient conditions of the data centers. In addition, the SHIs of the data centers are described, for instance, on page 13, lines 12-20 of the Specification, as quantifications of the amounts of re-circulation occurring in the data centers. An equation illustrating a manner in which SHI may be calculated is also provided on page 14, lines 1 and 2.

The Official Action alleges that Friedrich et al. discloses all of the features of Claims 1 and 32, including the supply heat indexes. More particularly, the Official Action asserts, with respect to Claim 4, that Friedrich et al. discloses a supply heat index on page 3, paragraph 23. That cited section in Friedrich et al. discusses the use of various types of temperature sensors placed at various locations of a data center. That section, however, does not discuss that a supply heat index is determined nor that re-circulation of airflow is measured.

In asserting that Friedrich et al. discloses a supply heat index, the Official Action appears to have taken the position that a reasonably broad interpretation of the supply heat index includes measuring temperatures. This interpretation, however, is improper because MPEP 2111.01(1)(a) indicates that "the words of a claim must be given their 'plain meaning' unless they are defined in the specification." Citing to *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989). In the instance case, the meaning of supply heat index has been clearly defined in the Specification, and, as such, must be given its defined meaning

**PATENT**

Atty Docket No.: 200400612-1

App. Ser. No.: 10/820,786

in the Specification. Clearly, therefore, the Official Action erred in the unreasonably broad interpretation of the terms "supply heat index."

In addition, Friedrich et al. apparently fails to disclose that energy efficiency coefficients, which are functions of the coefficients of performance and the supply heat indexes of the data centers, are determined.

For at least the foregoing reasons, it is respectfully submitted that Friedrich et al. fails to disclose each and every element claimed in independent Claims 1 and 32 of the present invention and therefore cannot anticipate these claims. The Examiner is therefore respectfully requested to withdraw this rejection and to allow Claims 1 and 32 and the claims that depend therefrom.

**Conclusion**

In light of the foregoing, withdrawal of the rejections of record and allowance of this application are earnestly solicited.

Should the Examiner believe that a telephone conference with the undersigned would assist in resolving any issues pertaining to the allowability of the above-identified application, please contact the undersigned at the telephone number listed below.

**PATENT**

Atty Docket No.: 200400612-1

App. Ser. No.: 10/820,786

Please grant any required extensions of time and charge any fees due in connection  
with this request to deposit account no. 08-2025.

Respectfully submitted,

Dated: September 1, 2006



Timothy B. Kang

Reg. No. 46,423

Mannava & Kang, P.C.  
8221 Old Courthouse Road  
Suite 104  
Vienna, VA 22182  
(703) 652-3817  
(703) 865-5150 (facsimile)